

SOFTWARE RELEASE NOTICE

SYSTEM: Automated Tracking Station (ATS)

RELEASE: 3.4 WGS, AGS, SGS, MGS

DATE: January 7, 2001

MODIFICATION DESCRIPTION:

- (1) Fix the problems related to the inability of ATS to initialize supports.
- (2) Provide FTP and post-pass summary results for the Data Stripper Controller node automation.
- (3) Display the ATS release number in the block diagram window.

Discrepancy Reports (DRs) Resolved:

16668, 16737, 16761, 16767, 16780, 16785, 16787, 16811, 16839, 16845, 16850, 16881, 16887, 16950, 16956, 16980, 16977, 17004, 17159, 17202, 17204, 17205, 17223, 17237, 17253, 17271, 17272, 17298, 17321, 17337, 17345, 17366, 17382, 17383, 17390, 17397, 17398, 17544, 17581, 17596

EPGN Configuration Control Requests (CCRs) Resolved:

None

Software Request-for-Supports (RFSs) Resolved:

- (1) Lien List Item #39 - Resolve Problem with ATS initialization/takedown.

FILES AFFECTED:

- (1) \11mInterface\Read11mMessage.cpp
- (2) \11mInterface\Send11mMessage.cpp
- (3) \General\PipeComm\Connect.cpp
- (4) \General\Pipecomm\ReportToMaster.cpp
- (5) \MonitorAndControl\MontrolAndControl.cpp
- (6) \MonitorAndControl\ReadLow.cpp
- (7) \MonitorAndControl\Support.cpp
- (8) \MonitorAndControl\ShowSchedule.cpp
- (9) \MonitorAndControl\MonitorAndControl.rc
- (10) \MonitorAndControl\SubsystemProcesses.cpp
- (11) \DSCNodeInterface\ReadDSCMessage.cpp
- (12) \DSCNodeInterface\SendDSCMessage.cpp
- (13) \DSCNodeInterface\KillDSCMessage.cpp
- (14) \DSCNodeInterface\DSCdefs.h
- (15) \DSCNodeInterface\DSCInterface.h
- (16) \StationAssetsEditor\AppFileIO.cpp
- (17) \ProfileEditor\AppFileIO.cpp
- (18) \ProfileEditor\AntennaView.cpp
- (19) \ProfileEditor\AntennaView.h
- (20) \ProfileEditor\InitData.cpp
- (21) \ProfileEditor\11mConfigDlg.cpp
- (22) \ProfileEditor\ProfileEditor.rc
- (23) \ProfileEditor\AppRes\PerResource.h
- (24) \PassResultsCompiler\PassResultsCompiler.cpp
- (25) \PassResultsCompiler\ProcesDSCResults.cpp
- (26) \PassResultsCompiler\FileCleanUp.cpp

ATS 3.4 source code is archived on a server located at Scientific-Atlanta, Inc. in Atlanta, Georgia. Source code configuration control is monitored by *Microsoft Visual Source Safe* and managed by ViaSat Satellite Networks, Inc. personnel. The procedures for building and distributing an ATS release are documented in *Automated Tracking Station (ATS): Source Code Configuration Control Procedures* created in June 2000 and available for distribution by contacting Edward Payne at NASA/WFF (757-824-1104).

All ATS Master projects were re-built using the Microsoft Visual C++ compiler installed with Microsoft Developer 5.0 and service pack 6. These project builds include Master applications:

C:\Master\Scheduler.exe
C:\Master\MonitorAndControl.exe
C:\Master\DSCInterface.exe
C:\Master\PassResultsCompiler.exe
C:\Master\11mInterface.exe
C:\Master\WOTISInterface.exe
C:\Master\ProfileEditor.exe
C:\Master\StationAssetsEditor.exe
C:\Master\ManualNotification.exe
C:\Master\MasterPassword.exe
C:\Master\SAFSHeartbeat.exe
C:\Master\RNInterface.exe
C:\Master\ShippingReport.exe
C:\Master\SADSCDialog.dll
C:\Master\SARceiver.dll

VALIDATION PROCEDURES:

Immediate installation is recommended to replace the ATS executables. Validation of the ATS bug fixes will occur over continued operational use and regression testing.

KNOWN BUGS OR LIMITATIONS:

ATS 3.4 does not include software development or fixes for:

- (1) ATS device heartbeat status polling (RFS 99-048) during down-time between supports.
- (2) GDP-911 and MSC-10693 switch connection clears after LOS.
- (3) GDP-911 and MSC-10693 switch status polling.
- (4) GDP-911 and MSC-10693 switch configuration file loads.
- (5) Automation of the Aydin BPSK Demodulator Model 3329 (MGS DR 99-014).
- (6) Automatic loading of profiles on demand for pre-pass tests. A manual schedule insert utility is provided.
- (7) MetrumBVLDS tape graphical user interface lock-ups (MGS DRs 98-126, 99-054, 99-093).

INSTALLATION/ACTIVATION PROCEDURE:

ATS 3.4 is composed of applications for installation on Master PCs only. No software changes were made to ATS node PCs. Installation and activation will be coordinated between ViaSat software engineers, CSOC software personnel and WFF scheduling and ground station operations.

A 1-hour Master downtime period is required for file delivery to AGS and WGS ground stations. File delivery will be initiated from WGS and be the responsibility of the ATS software development group. Some assistance from the ground station operations personnel is required in order to facilitate the delivery.

Installation and delivery does not activate the ATS software. ATS 3.4 activation requires activation of SCC release 3.x or 4.x.

A 3-hour Master/Node downtime is required for file delivery to SGS and MGS. SGS/MGS Master and Node PCs must be installed with the full ATS 3.4 release because their operational systems were never activated to ATS 3.2 and ATS 3.3.

Installation of ATS 3.4 (from WGS) will proceed according to the following directions:

at WGS (January 8, 2001):

- (1) Alert the link controller that an ATS 3.4 installation is scheduled.
- (2) Stop ATS on *wgsmaster2* and logout. Login to *wgsmaster2* as user *Developer*.
- (3) Create a folder named *Ats34* under c:\Downloads on *wgsmaster2*.
- (4) Copy the *Master*, *WFF* and *Node* folders from the installation CD to *Ats34*. Repeat steps (2) – (4) for *wgsmaster1*. All network file copies will originate from this folder on *wgsmaster2*.
- (5) Stop ATS on *wgsnode1* and logout. Login to *wgsnode1* as user *Developer*.
- (6) Create a folder named *Ats34* under c:\Downloads on *wgsnode1*.
- (7) Copy the *Node* and *WFF* folders from *wgsmaster2*: c:\Downloads\Ats34 to *ATS34* on *wgsnode1*. Repeat steps (5) – (7) for *wgsnode2*.
- (8) Re-start ATS 3.3.1 on ATS Master and Node PCs. ATS 3.4 is installed, but not activated.

at AGS (January 10, 2001):

- (1) Call the operations center (contact Debbie Dukes at x2186 for numbers) and alert personnel that an ATS installation is scheduled. Their assistance may be required later in steps (5) and (8).
- (2) Login to *wgsmaster2* as user *Developer*.
- (3) Connect ATS PC *agsmaster1* as a network drive and note the parenthetic drive letter; for ex. “c on ‘150....’ (f)”. Drive letter (f) is used in this example.
- (4) Use Windows Explorer and copy the *Master* and *Wff* folders from the c:\Downloads\Ats34 folder on *wgsmaster2* to a *Download\Ats34* folder on *agsmaster1* at (f). ATS 3.3.1 is already installed. Estimated copy time is approximately 40 minutes.
- (5) Repeat steps (3) and (4) for *agsmaster2*. (In order to expedite the copy to other AGS PCs, an alternative plan is to request the AGS operator to conduct the copies from *agsmaster1*. This alternative will save significant network time delays.)
- (6) Connect ATS PC *agsnode1* as a network drive and note the parenthetic drive letter; for ex. “c on ‘150....’ (f)”. Drive letter (f) is used in this example.
- (7) Use Windows Explorer and copy the *Node* and *Wff* folders from the c:\Downloads folder on *wgsmaster2* to a *Downloads\Ats34* folder on *agsnode1* at (f). Estimated copy time is approximately 40 minutes.
- (8) Repeat steps (6) and (7) for *agsnode2* and *agsnode3*. (In order to expedite the copy to other AGS PCs, an alternative plan is to request the AGS operator to conduct the copies from *agsnode1*. This alternative will save significant network time delays.)

at SGS (January 11, 2001):

- (1) Call the operations center (contact Debbie Dukes at x2186 for numbers) and alert personnel that an ATS installation is scheduled. Their assistance may be required later in steps (6) and (9).
- (2) Login to *wgsmaster2* as user *Developer*.
- (3) Connect ATS PC *sgsmaster1* as a network drive and note the parenthetic drive letter; for ex. “c on ‘150....’ (f)”. Drive letter (f) is used in this example.
- (4) Use Windows Explorer and copy ATS 3.3.1 to *sgsmaster1*. Copy *ATS331-11152000* from the c:\Downloads folder on *wgsmaster2* to the *Downloads* folder on *sgsmaster1* at (f). Estimated copy time is approximately 60 minutes.
- (5) Use Windows Explorer and copy ATS 3.4 to *sgsmaster1*. Copy the *Master* and *Wff* folders from *Ats34* on *wgsmaster2* to the c:\Downloads\Ats34 folder on *sgsmaster1* at (f). Estimated copy time is approximately 60 minutes.
- (6) Repeat steps (3) - (5) for *sgsmaster2*. (In order to expedite the copy to SGS PCs, an alternative plan is to request the SGS operator to conduct the copies from *sgsmaster1*. This alternative will save significant network time delays.)
- (7) Connect ATS PC *sgsnode1* as a network drive and note the parenthetic drive letter; for ex. “c on ‘150....’ (f)”. Drive letter (f) is used in this example.
- (8) Use Windows Explorer and copy the *Node* and *Wff* folders from the c:\Downloads folder on *wgsmaster2* to a *Downloads\Ats34* folder on *sgsnode1* at (f). Estimated copy time is approximately 40 minutes.

- (9) Repeat steps (7) and (8) for *sgsnode2* and *sgsnode3*. (In order to expedite the copy to other AGS PCs, an alternative plan is to request the AGS operator to conduct the copies from *sgsnode1*. This alternative will save significant network time delays.)

at MGS (January 17, 2001):

- (1) Call the operations center (contact Debbie Dukes at x2186 for numbers) and alert personnel that an ATS installation is scheduled. Login to *wgsmaster2* as user *Developer*.
- (2) Connect ATS PC *mgsmasternode* as a network drive and note the parenthetic drive letter; for ex. "c on '150....' (f)". Drive letter (f) is used in this example.
- (3) Use Windows Explorer and create a folder named *Downloads* under the root drive on *mgsmasternode*.
- (4) Use Windows Explorer and copy ATS 3.3.1 to *mgsmasternode*. Copy *ATS331-11152000* from the c:\Downloads folder on *wgsmaster2* to the Downloads folder on *mgsmasternode* at (f). Estimated copy time is approximately 60 minutes.
- (5) Use Windows Explorer and copy ATS 3.4 to *mgsmasternode*. Copy *Ats34* from the c:\Downloads folder on *wgsmaster2* to the *Downloads* folder on *mgsmasternode* at (f). Estimated copy time is approximately 60 minutes

Activation of ATS 3.4 **from WGS** will proceed according to the following directions:

at WGS (January 8, 2001):

- (1) Alert the link controller that ATS 3.4 activation is scheduled.
- (2) Stop ATS processes and logout on Master and Node PCs.
- (3) Login to *wgsmaster2* as user *Developer*.
- (4) Backup the existing ATS 3.3.1. Copy folder c:\Master to c:\Master331-Backup. Copy c:\Wff to c:\Wff331-Backup.
- (5) Activate ATS 3.4. Copy the contents of c:\Downloads\ATS34\Master to c:\Master. Copy the contents of c:\Downloads\Wff to c:\Wff.
- (6) Repeat steps (4) – (5) for *wgsmaster1*.
- (7) Login to *wgsnode1* as user *Developer*.
- (8) Backup the existing Node ATS 3.3.1. Copy folder c:\Node to c:\Node331-Backup. Copy c:\Wff to c:\Wff331-Backup. Answer "OK" to overwrite?
- (9) Activate ATS 3.4. Copy the contents of c:\Downloads\ATS34\Node to c:\Node. Copy the contents of c:\Downloads\Wff to c:\Wff. Answer "OK" to overwrite?
- (10) Repeat steps (7) – (9) for *wgsnode2*.
- (11) Restart Node PCs. Restart Master PC.

at AGS (January 10, 2001):

- (1) Alert the operation that ATS 3.4 activation is scheduled. Request their assistance using telephone support. Their assistance can significantly reduce the ATS 3.4 activation time.
- (2) Request operations to stop ATS processes and logout on Master and Node PCs.
- (3) Login to *wgsmaster2* as user *Developer*.
- (4) Request an AGS operator to login to *agsmaster1* as user *Developer*.
- (5) Backup the existing ATS 3.3.1. Copy folder c:\Master to c:\Master331-Backup. Copy c:\Wff to c:\Wff331-Backup. AGS operations personnel can assist to save time.
- (6) Activate ATS 3.4. Copy the contents of c:\Downloads\ATS34\Master to c:\Master. Copy the contents of c:\Downloads\Wff to c:\Wff. AGS operations personnel can assist to save time.
- (7) Repeat steps (4) – (6) for *agsmaster2*.
- (8) Request an AGS operator to login to *agsnode1* as user *Developer*.
- (9) Backup the existing Node ATS 3.3.1. Copy folder c:\Node to c:\Node331-Backup. Copy c:\Wff to c:\Wff331-Backup. Answer "OK" to overwrite?
- (10) Activate ATS 3.4. Copy the contents of c:\Downloads\ATS34\Node to c:\Node. Copy the contents of c:\Downloads\Wff to c:\Wff. Answer "OK" to overwrite?
- (11) Repeat steps (8) – (10) for *agsnode2* and *agsnode3*.
- (12) Restart Node PCs. Restart Master PC.

at SGS (January 11, 2001):

- (1) Alert the operation that ATS 3.4 activation is scheduled. Request their assistance using telephone support. Their assistance can significantly reduce the ATS 3.4 activation time.
- (2) Request operations to stop ATS processes and logout on Master and Node PCs.
- (3) Login to *wgsmaster2* as user *Developer*.
- (4) Request an SGS operator to login to *sgsmaster1* as user *Developer*.
- (5) Backup the existing ATS 2.3. Copy folder c:\Master to c:\Master23-Backup. Copy c:\Wff to c:\Wff23-Backup. SGS operations personnel can assist to save time.
- (6) Activate ATS 3.4. Copy the contents of c:\Downloads\ATS34\Master to c:\Master. Copy the contents of c:\Downloads\Wff to c:\Wff. SGS operations personnel can assist to save time.
- (7) Repeat steps (4) – (6) for *sgsmaster2*.
- (8) Request an AGS operator to login to *sgsnode1* as user *Developer*.
- (9) Backup the existing Node ATS 2.3. Copy folder c:\Node to c:\Node23-Backup. Copy c:\Wff to c:\Wff23-Backup. Answer “OK” to overwrite?
- (10) Activate ATS 3.4. Copy the contents of c:\Downloads\ATS34\Node to c:\Node. Copy the contents of c:\Downloads\Wff to c:\Wff. Answer “OK” to overwrite?
- (11) Repeat steps (8) – (10) for *sgsnode2* and *sgsnode3*.
- (12) Restart Node PCs. Restart Master PC.

at MGS (January 17, 2001):

- (1) Alert the operation that ATS 3.4 activation is scheduled. Request their assistance using telephone support. Their assistance can significantly reduce the ATS 3.4 activation time.
- (2) Request operations to stop ATS processes and logout on Master and Node PCs.
- (3) Login to *wgsmaster2* as user *Developer*.
- (4) Request an MGS operator to login to *MgsMasterNode* user *Developer*.
- (5) Backup the existing ATS 2.3. Copy folder c:\Master to c:\Master23-Backup. Copy c:\Wff to c:\Wff23-Backup. MGS operations personnel can assist to save time.
- (6) Activate ATS 3.4. Copy the contents of c:\Downloads\ATS34\Master to c:\Master. Copy the contents of c:\Downloads\Wff to c:\Wff. MGS operations personnel can assist to save time.
- (7) Backup the existing Node ATS 2.3. Copy folder c:\Node to c:\Node23-Backup. Copy c:\Wff to c:\Wff23-Backup. Answer “OK” to overwrite?
- (8) Activate ATS 3.4. Copy the contents of c:\Downloads\ATS34\Node to c:\Node. Copy the contents of c:\Downloads\Wff to c:\Wff. Answer “OK” to overwrite?
- (9) Remove all operational profiles on *MgsMasterNode* at c:\Master\OpProfiles. They will be re-created when ATS re-starts.
- (10) Restart Node PCs. Restart Master PC. Note any errors reported in the GRM windows and Master message log.

OPERATIONAL IMPLICATIONS:

ATS 3.4 should provide more reliable un-attended operation. The annoying ATS hang-up should be resolved.

HARDWARE REQUIREMENTS:

Master/Node PCs (no changes)

- Minimum Pentium-200 MHz for Master and Nodes.
- Minimum 128megabytes RAM
- 2 Gigabyte system drive
- Windows NT 4.0 (service pack 6)
- Devices connected to Node PCs via RS-232 port (and, in some cases an IEEE converter) on a Digibox. A Hewlett-Packard workstation (HP-UX 10.2) functions as an 11meter antenna control console.

COMMENTS:

Points of contact for ATS release 3.4 is [Edward Payne](#)/CSOC/GHG (757-824-1104).

APPROVAL:

The software modifications described in this release notice has been validated and accepted.

NASA EPGN Project Manager

Date

NASA AWOTS/WGS Project Manager

Date

SOFTWARE RELEASED:

The software modifications described in this release notice has been completed and released to ground station operations.

System Manager

Date

NASA Program Monitor

Date